

1 You can mix and match CBR and UBR on the
2 same loop. Right now the maximum capabilities we have are
3 looking to expand them but are one CBR and one UBR on a loop.
4 That's the maximum capability, or you can have one of each or
5 either one. We would be interested in getting feedback about
6 if you see needs for, you know, more PVCs on the same loop of
7 a UBR variety or more of CBR PVC, if there's -- what type of
8 business needs you guys have out there. Different types of
9 equipment we have have different capabilities and our vendors
10 have been asking for different sorts of input as far as how
11 we'd like to do it. So we need to get some input from you
12 guys on that.

13 Admission control prevents bandwidth
14 oversubscription. It's an important piece here. You guys
15 have heard us say numerous times that our biggest concern
16 about CBR is the impact on the capacity available to the
17 network. What CBR requires you to put in place is something
18 called a connection admission control algorithm, a CAC, C-A-C.
19 A CAC alg it's called. A CAC algorithm is invoked at the
20 provision -- at the time of provision and it basically goes
21 into the network element and says I have request for a new
22 service, is there enough capacity on that network element to
23 support this additional service and on a service order by
24 service order basis and sends a response back up to our
25 provisions systems to tell it whether that capability -- that

1 capacity is there.

2 If a service would -- if one more customer
3 gets provision and would violate the connection admission
4 control algorithm, that service order will be rejected. And
5 I'll talk a little bit more about that later. What that
6 allows you to do is provision too much CBR, it starts to
7 affect the quality of service of others, other customers on
8 the network, potentially other CBR customers and certainly
9 other UBR customers. And finally -- so admission control
10 takes place during the provision when I first turn on a
11 service.

12 Policing, what I mentioned before, takes
13 place after the service has been established but while I'm
14 sending the traffic to make sure that the traffic conforms to
15 the parameters that we've set up.

16 This a little information about some of
17 the capacity management concerns that we've got. This is a
18 pretty high level view of the ATM pieces of the network. We
19 have the OCD and fiber OC-3cs linking it to the RTs. And the
20 number of users that we can support on this network is a
21 function of a lot of things. There a lot of different
22 capacity concerns that we have here. It's dependent on the
23 distribution of the DSL line rates.

24 Very common speed offering is 1.5 megabits
25 per second downstream and something lesser, 120 to three,

1 four, somewhere in that range upstream but there's a whole
2 wide range of speeds down, some customers as low as 128 or
3 lower kilobits per second downstream up to, you know, six megs
4 upstream. We have a whole range across the network.

5 So the bandwidth of that -- of the UBR of
6 the DSL streams, the amount of UBR traffic sent and the amount
7 of the CBR traffic that's been provisioned on the network, the
8 busy hour load of that CBR traffic and the overbooking ratios
9 for UBR, CBR has a guaranteed place on the network pipe in
10 order to guarantee that speed. UBR provides overbooking so
11 you oversubscribe the same data and to more than one customer
12 but not everybody is going to be transmitting at the same
13 time. Since it's nonguaranteed, that's allowed by the traffic
14 specifications and generally ends up working just fine. But
15 you can specify how much do I overbook that -- how much do I
16 oversubscribe that capacity; so that's another factor.

17 But we have capacity management concerns
18 in the OCDs in terms of the number of virtual circuits that we
19 can manage there. That's something that we're monitoring and
20 that we're in control of. Bandwidth on the OC-3 between the
21 RT and the OCD, that's also our concern and we have to
22 monitor that to make sure the aggregate bandwidth on there
23 doesn't exceed the OC-3 capacity that we have. If it does
24 exceed it, then we need to modify the network in order to
25 support that. And then there are also limitations in the RTs

1 in terms of the number of cards that it can support and the
2 number of virtual circuit connections they can provide there.

3 This is a little picture that shows what
4 CBR does to a network. And so I've got this diagram at the
5 bottom, the total type of that band down there represents the
6 total bandwidth, for instance, of our network of the OC-3c
7 type. And at the beginning, so towards the left side here, I
8 have a hundred UBR customers represented by the bandwidth in
9 the green up at the top and I have 20 CBR customers
10 represented taking up the bandwidth at the bottom.

11 Now, really the way this works is the 20
12 CBR customers at the bottom, they get provision and guaranteed
13 that little chunk at the bottom there. The UBR customers get
14 whatever's left. So the hundred UBR customers get whatever's
15 left. They're not guaranteed a slice. They're guaranteed
16 whatever's left. So if I add CBR customers to the network, as
17 I move to the right of this graph here, as I add customers to
18 the network, now I have 25 CBR customers. As I add those five
19 more CBR customers, the hundred UBR customers I had before
20 still have access to whatever's left; however, now there's
21 less left because the CBR customers are guaranteed a larger
22 chunk of that bandwidth.

23 This is the capacity concern that we have
24 is that even though UBR customers and the quality that we're
25 providing -- quality of service that we're providing the UBR

1 customers today, even though it's unguaranteed, we still feel
2 an obligation to provide a pretty good level of service or
3 else nobody's going to pay for DSL.

4 But you can see that as we add -- and if
5 we added in an uncontrolled fashion more and more CBRs to the
6 network, more and more guaranteed services to the network at
7 higher and higher speeds, it starts to impact the quality of
8 service received by those UBR customers because they're
9 constrained to a smaller and smaller piece of the leftover
10 bandwidth.

11 Let me talk a little bit now about
12 ordering this. Now, some of these things are being worked out
13 right now. The data that's required for ordering some of this
14 and exactly how it's going to appear on the [unintelligible]
15 and things like that is under some revision right now, but
16 this is a pretty good view of what we think it looks like.

17 So the initial piece CLEC that's --
18 there's going to be a CLEC responsibility here. We're going
19 to need to provide access to CLECs information about which RTs
20 are CBR capable. Now, initially there's not really new
21 hardware that needs to be deployed in this, but the initial
22 CBR capability's only going to be provided in locations with
23 Litespan digital loop carrier and CBX 500 OCDs. Now, Litespan
24 digital loop carrier is the generally approved digital loop
25 carrier that SBC region as our primary deployment vehicle, but

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1 we have another deployment vehicle I think I've mentioned in
2 the past is AFC, AccessMAX UMC1000, which is in deployment.

3 The OCDs -- we have other OCDs other than
4 the CBX 500. We also have a Cisco 6400 OCDs. Now, the AFC
5 AccessMAX and the Cisco 6400 don't currently support CBR
6 completely enough for SBC to be able to provision and deploy
7 and maintain that service. We're looking to be able to roll
8 those out in kind of subsequent phases through this certainly
9 before the end of the year, but it depends on some of the
10 development time frames from the vendors. Probably somewhere
11 in the middle of the year we'll have those capabilities
12 available in those other networks.

13 And this is an important point because
14 currently the Cisco OCD is the only one deployed in the
15 Ameritech five states. So that means that the CBR offering is
16 not initially going to be available in the Ameritech states.
17 It will be fully available throughout the western states, the
18 southwestern states and in the southern.

19 We have -- so information that we're going
20 to provide to the CLECs will specify RTs that are capable of
21 CBRs so that meet those served by Litespan and then served by
22 an OCD. But also having exceeded their capacity allocation
23 per CDL we're going to limit the amount of capacity that's
24 available for CBR traffic in order to try to minimize the
25 effect on the UBR customers.

1 Not exactly sure how we're going to
2 provide that information today. We're going to try to provide
3 it through some format that's familiar to you guys. It may
4 be through the existing DTI tool. We haven't completely
5 worked that out yet but want it through some sort of
6 mechanized interface that you guys can access.

7 On the SBC side, what that's going to
8 allow you to do is before you submit an order, double-check to
9 make sure that RT is capable of providing CBR. What SBC is
10 then going to do is in our order process, as soon as it gets
11 into our system it's going to mechanically check the same
12 thing. We're going to go in and check to see -- make sure
13 that that system is capable of providing CBR as capacity for
14 CBR and will reject the order if it doesn't. And we're going
15 to use the same data source for that checking as will be
16 provided for you guys so you'll have access to the same data
17 that we have for our checking.

18 Into some of the nitty-gritty here,
19 there's a service order code on the USOC on the LSR today,
20 service order code that specifies the UBR PVC before that
21 element gets translated into a particular USOC. We're going
22 to be adding a new USCP for this CBR. We may have to add two
23 but at least one more USOC in order to specify the CBR
24 permanent virtual circuit that rides across this network.

25 Now, as I said, you'll still use the same

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1 subloop elements that you're used to ordering today, the same
2 cross connects out in the field. There are the same SAI cross
3 connect portions and the same OCD port and cross connected
4 collocation the same USOCs for that sort of information as
5 you're using today. There aren't any additional physical
6 cross connects associated with this product.

7 Some of the other information that you're
8 used to providing today, when we place an order you provide --
9 there's a bid that's referred to as a P-R-O-F, PROF FID. It
10 specifies the line rate, some of the line rate information
11 for the line. That is still used with CBR. It's used for
12 every DSL order. It's important to mention because it's
13 probably the best way to think of that PROF FID really refers
14 to the subloop. It refers to the characteristics of the loop
15 and the card kind of as an aggregate. And as I add additional
16 PVCs, they all have to fit within that complete -- that total
17 aggregate bandwidth that I've allocated using this PROF FID.
18 So that's kind of the overall thing and everything else has to
19 fit inside of it.

20 Now, then today we're also -- you also
21 provide information on VPI, VCI and provide an A and a Z
22 location, and the locations, I can never remember which is A
23 and Z. The customer end has to be -- has to have a 0/35
24 specified for the UBR PVC based on the ADSL standards.
25 Now, these -- the existing VPI and VCI values will continue to

1 be used the exact same way they are today for the UBR portion.

2 But now if we want a provision CBR we have
3 to add some other information. First of all, we're going to
4 -- we're adding a new information field called PVC typing,
5 which if it's not present, that means that this is a UBR kind
6 of old styled, the current UBR service offering.

7 Other values that we're allowing with
8 this, the new values we're allowing will be to specify whether
9 I want a CBR only service or if I want a CBR plus UBR service
10 offering, so to specify to our network what type of -- the
11 type of number of PVCs that we want. If we expand service
12 offerings in the future, we may add additional types here.

13 We have a CBRI, CBR index data field.
14 This is similar to a profile but it's for the CBR stream.
15 It's specifically for the CBR stream. It'll specify the exact
16 values of the parameters that I was mentioning before, peak
17 cell rate, the cell delay, cell transfer delay, cell transfer
18 delay variance and cell loss ratio, the specific
19 characteristics of the incoming traffic for that indicator.

20 Now, with the profile -- with a PROF FID
21 initially we were allowing CLECs to specify a full range of
22 the bid rates on there. With the CBR information we're going
23 to be specifying an initial index offering for initial service
24 offering and would like -- would appreciate it if you'd again
25 talk to your account representatives if you've got different

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1 needs for different types of profile values than the initial
2 ones offered.

3 But it works -- it works pretty much just
4 like the existing profile. But, again, this is the profile
5 for the CBR PVC, so I said that has to fit within the
6 constraints of the overall PROF FID. In the final information
7 down here is the CBR VPI and VCI values very similar to the
8 UBR VPI and VCI values. You'll use these for CBR PVCs
9 and this also has a requirement the Z termination customer
10 premise end has to use a value of 0/40 and also conforms to
11 ATM forum standards.

12 We're going to try to use as much as
13 possible -- reuse as much of the information and capabilities
14 that we have in the broadband service space deployed into two
15 processes. Again, you still have to have an OCD port in place
16 before you can -- so you have to have the infrastructure piece
17 in place before you can place an LSR. You can add -- we're
18 going to make sure that you can take an existing UBR customer
19 and add -- upgrade to add a CBR service to that customer, make
20 sure that that's capable, that that's a capability.

21 And I have down here loophole system will
22 check the RT status for the CBR availability. That's the
23 system that we're going to use -- we think we're going to use
24 in the order flow right now to access the information on
25 whether an RT is capable of providing CBR. Loophole won't

1 actually have that information but we'll use it to go out and
2 query another database that we'll use to get that sort of
3 information.

4 We're looking still to issue the
5 accessible letter. I can't remember -- I don't know if we
6 have actually -- somebody's pulled out a calendar and counted
7 up 180 days and figured out if it's March 8th or March 6th or
8 something like that. We'll issue it on the right date. And
9 -- but individual contracts are going to be required for this
10 service, so we'll have to -- for those who have existing
11 contracts, they'll have to be updated in order to include
12 these new capabilities and readout lists.

13 This is going to be a somewhat restricted
14 availability. Initially it's going to be offered where we
15 have Litespan NGDLC and Lucent OCDs which is most of the
16 locations in the west and the southwest region and the
17 southern New England region. We are going to limit the fiber
18 feeder capacity for CBR. Our technology resources labs are
19 still analyzing the specific availability of the CBR or the
20 specific requirements of the CBR in order to figure out what
21 that cap is going to be at. Right now we think it might be
22 somewhere in the 20 to 30 percent of that OC-3 range which we
23 think should fully meet the initial CBR demands that we've
24 got.

25 As we gain more experience with these

1 capabilities we'll seek input about if we need to raise some
2 of these limitations. We also need to gain more experience
3 with managing just the UBR traffic on the network. And that
4 loophole is going to be used to make sure that we're only
5 offering where we have the technical capability and the
6 capacity.

7 In the future, these are some of the
8 things that we're evaluating the availability for and we want
9 the feedback on. We're looking into -- with the speed offer
10 as I gave you some of the information about our capacity
11 concerns and where we have capacity concerns and what adding
12 CBR to the network can do, we're concerned about the speed and
13 impact of CBR in existing UBR customers. For those of you who
14 have UBR customers out there I hope would be concerned about
15 that, too.

16 And what we would like, though, we would
17 like to get input on the speeds. And if you don't want to
18 tell us specific speeds, you can tell us some of the
19 applications, some of the protocols that you'd like to
20 transmit over that ATM offering. That'll give our technology
21 resources folks enough information to try to analyze what some
22 of those requirements would be and what some of the cell
23 transfer delay and delay variance and peak cell rate levels
24 need to be in order to support those different protocols and
25 different thresholds.

1 Symmetric and asymmetric rates are
2 possible with this capability. If you'd like to -- if we
3 foreseen most of the need would be in terms of symmetric
4 rates. If there's a desire for asymmetric services we'd be
5 interested in finding out about that also. We really need to
6 verify our capacity management systems. We are building some
7 systems to give us updates on the capacity the OCD and the
8 OC-3 ports to make sure that we can trend the exhaust and so
9 we know -- we know if we have limitations in the network.

10 Those systems aren't done yet and we're
11 still developing the engineering methods, the better engineers
12 will use in order to track those. And as we gain experience
13 with that, we're going to be able to -- we'll be evaluating
14 increasing the speeds of these -- of this service based on the
15 input that you guys provide to us. I mentioned before more
16 PVCs. We can potentially provide the ability to do that. We
17 don't really know what you're interested in. You have
18 different services that you want to provide to customers that
19 aren't -- that require additional UBR PVCs or require
20 additional CBR PVCs and these are things that are kind of
21 [unintelligible] in the past and we'd like to get information
22 -- we'd like to get information about them in our
23 collaboratives through your account manager.

24 And expanded availability is something
25 that we definitely want to do. As soon as possible we would

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1 want to get this capability on the Cisco OCDs. The Cisco OCD,
2 to get the technical capability to do this, right now it's
3 targeted at the end of April. The switch itself works just
4 fine, actually has the CBR capability today, but their
5 management systems don't have the provisioning interface to
6 allow us provision or maintain or do anything with the CBR
7 PVCs. We need that. That's pretty critical ability for us to
8 be able to manage that capability in the Cisco network. At
9 the end of April we'll get that capability and we're planning
10 -- we want to get it into our TRI labs and test it in outdoor
11 field locations as soon as we can.

12 And then the AccessMAX actually comes out
13 with that ability sooner. We're expecting the ability on that
14 by the end of first quarter -- first quarter this year. But
15 since the AccessMAX has got a smaller deployment bid, then we
16 think we'll probably have a bigger bank on getting into the
17 Cisco OCD capable first and we're going to try to focus on
18 that first before we come back and get the AccessMAX.

19 Questions? This again was supposed to be
20 a nice SBC logo. It's a capital A. Any questions?

21 MS. CARTER: You mentioned the LoopQual
22 system will check RT status for CBR availability. I assume to
23 make that availability in the loop process system happen,
24 you're going to have to go through and populate that
25 information in the system?

1 MR. WALLACE: The specific flows from
2 system to system up in kind of the beginning of the order
3 flow, I don't exactly know. Things come in through -- they
4 come in through laser. I can't remember all the systems up
5 there, I have to admit. One of them up there -- the
6 information is actually going to be pulled by some tools that
7 we're developing that will query the network elements in
8 realtime and will populate some flat files that will kind of
9 be stored as a database that if it's loophole or another
10 system up there it will then access that database that will be
11 updated on like a daily basis.

12 MR. BOYER: If I may. This is Chris Boyer
13 with SBC. I think in terms of your question's related to
14 loophole and loophole response. If it has a response, it will
15 tell you whether CBR's available or not. I don't think that's
16 been determined or not. I don't think that the loophole
17 system has been updated to extent that when you initiate a
18 loophole, one of the 35 or so fields you get back will say
19 . . . at the address or not. I'm not sure if they've done
20 that yet

21 MR. WALLACE: The information that we plan
22 on giving won't be through -- I don't think will be through
23 the loophole tool but will be based on the same information.
24 It'll be accessing the same information.

25 MS. CARTER: I would like to put this

1 forth as a request if you would be willing to take it back and
2 consider it. Today many CLECs have an issue with the loop
3 process system either having missing or inaccurate
4 information. And if in fact you are going to go through some
5 sort of process to populate the RT information in that system,
6 I would ask that you also as part of that process look at
7 populating missing data and correcting inaccurate information
8 as long as you're going through that process.

9 MR. BOYER: Well -- again this is Chris
10 Boyer with SBC and I think the plan -- I think what Matthew
11 was eluding to is how the loophole is today. Today when you
12 issue an order just like with a regular DSL, we use the
13 loophole system not only to provide information to you about
14 what's available, we also edit it against it. So that when an
15 order comes through -- say for instance you did a loop
16 qualification on a given line just in a standard world, not
17 taking CBR. If you did a LoopQual on a given DSL line, our
18 system will edit against that database to determine whether or
19 not that is green, red or yellow, and that's how we know to
20 accept or reject a service order.

21 I think from that standpoint what
22 Matthew's eluding to is that as we turn up CBR functionality
23 and given RT locations, we're going to use the same process
24 to determine whether we should go ahead and let your order go
25 through or if we should up front reject the order. But I

1 don't think there's any plan at this point to go through and
2 proactively update all of the information in the loophole
3 database for all. I know there's been a lot of discussion
4 about loophole in various arenas. I don't think there's any
5 plan to correctively update the database as an internal tool.

6 MS. CARTER: So what you're saying is that
7 you're not going to do some sort of proactive update to
8 populate the remote terminal information in that database
9 including the CBR?

10 MR. BOYER: I'm not certain yet. I don't
11 think that's been determined yet.

12 MR. GINDLESBERGER: Larry Gindlesberger
13 from Covad. Matt, quick question. As far as bandwidth
14 restriction speaking about CBR customers versus the UBRs, at
15 this point do you have any plans on limiting the amount of CBR
16 customers that would be in the system? My concern at that
17 point would be we've got UBR customers in there and all of a
18 sudden the bandwidth depletes because of the addition of more
19 than the normal CBR customers.

20 MR. WALLACE: Yeah. That was -- it was in
21 here somewhere. Yes, we do. Currently we haven't fixed on a
22 specific percentage yet but it will be based on a percentage
23 of the traffic in the OC-3c that goes out from an OCD out to
24 the RT and foresee limiting that to a percentage somewhere in
25 the 20 to 30 percent range. We feel in the analysis we've

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1 done, we feel that we can probably support that much CBR
2 traffic and that allowing 70 to 80 percent of that pipe
3 for UBR still provides -- will still provide adequate capacity
4 for the amount of subscribers. In our deployment of Litespan
5 that, you know, the Litespans can only support so many
6 customers so as we look at how many customers Litespan can
7 support, we think that that 70 to 80 percent of that OC-3c
8 will be able to support the amount of customers that we can
9 get into a Litespan.

10 Now, if we have, you know, breakthroughs
11 on capacity of Litespan and DSL takes off like crazy, you
12 know, that could be a concern. But in that case we're going
13 to have capacity concerns everywhere in the network and are
14 going to have to look to deploying more OC-3s. But right now
15 20 to 30 percent is kind of a cap on the amount of CBR that's
16 in terms of bandwidth, not in terms of subscribers. So we'll
17 add up the amount of bandwidth and we will be evaluating that
18 threshold and may move up or down based on the demand of UBR
19 and the demand of CBR.

20 We also have to -- one of the things that
21 we have to take into account is there are other quality of
22 services out there other than just CBR and UBR. And depending
23 on new services that become available that require some of
24 these other quality services, we may have to carve out another
25 piece of that OC-3 pipe for those other quality services. So

1 we don't want to give away too much of the OC-3 initially. We
2 want to kind of be conservative of that shared capacity at
3 least until we start getting some customers networking more
4 and more about it. Yes?

5 MR. NUTTALL: Along that line, I guess --

6 MR. WALLACE: And your name is?

7 MR. NUTTALL: Gary Nuttall with Sage.

8 Along that line of CBR capacity, once you get it, does that
9 mean it's going to be first come first serve or are you going
10 to have an ongoing program if there's more capacity needs as
11 you go forward to add capacity for the CBRs? And I guess the
12 other part would be you're putting the letter out in March, so
13 when is the first going to be available and how aggressive is
14 the rollout and what's the whole mechanism to add CBR
15 capability capacity on an ongoing nature as opposed to here it
16 is, that's it, stops?

17 MR. WALLACE: Let me try to address the
18 second part first. The CBR deployment isn't going to take a
19 new deployment. There's not physical infrastructure or
20 software to deploy. We have to upgrade our -- the OSSs in
21 order to support that. So generally those OSSs are on a
22 regional basis and we'll get the provisioning systems and the
23 support systems upgraded through CBR -- really support CBR
24 with that accessible later offer. So it'll be in the same way
25 as the combined voice and data offering. Once the accessible

1 letter is put out on any of the Litespan NGDLCs posted by
2 Lucent OCDs CBR service offering will be available.

3 Now, in terms of the capacity, we haven't
4 answered that question yet for ourself. The 20 to 30 percent
5 cap that we're looking at right now, we've based that on --
6 based that on some analysis of here's some potential CBR
7 speeds that our customers may need initially, and in the
8 future here's some expected penetrations in terms of relative
9 to, you know, as many of the UBR customers this percentage of
10 them may also be CBR or this percentage may change and become
11 a CBR only offering.

12 We've been doing some analysis of that and
13 right now we see the 20 to 30 percent of the capacity is going
14 to meet the forecasted needs that we're evaluating. If we see
15 demands on the CBR needs that are different, we may be in a
16 position where we need to reevaluate that threshold.
17 Something that may also change that is if the UBR service, the
18 requirements that we've allocated for the UBR service don't
19 turn out to be as onerous as we need. We've been fairly
20 conservative in our estimate. We don't want to impact that
21 service too much, but if we've been too conservative, that may
22 be another cause to raise that threshold a little bit.

23 So to answer your question a little bit,
24 we haven't decided internally but there's possibility that it
25 could be changed, but right now we haven't -- we don't have

1 the policy that says as soon as we hit that, you know, 20 or
2 30 whatever that threshold is, you know, that we'll break the
3 OC-3 chain and add more capacity to the entire -- we don't
4 know what we're going to do.

5 MR. NUTTALL: I guess one other comment I
6 would make then is in the input into your planning process is
7 let's not create an environment so that the whole game is to
8 tie up as much CBR bandwidth as you can because it's not going
9 to be available down the line. And so if it becomes first
10 come first serve and there is a cap limit, one carrier could
11 go out and tie everything up and really not fully be utilizing
12 it because they might need it down the line and shut everybody
13 else out.

14 MR. WALLACE: Yeah. I think somebody
15 would be hard pressed to that because they'd have to -- I
16 mean, you'd have to find all the -- you'd have to have paying
17 customers out there or they'd have to be paying customers out
18 there. That would be a potential that somebody could go out
19 and do that but they'd have to have somebody at the end of the
20 loop paying the bill, I would foresee. Otherwise that'd be
21 an expensive proposition to just tie it up. It is possible.

22 MR. NUTTALL: It's amazing how creative
23 people can get when they want to.

24 MR. WALLACE: You guys are really
25 creative. You guys can be very creative.

1 MR. BOYER: Chris Boyer for SBC again. I
2 would just propose that specific questions like that are
3 really terms and conditions contractual type issues about how
4 it would be offered, and I think when the letter goes out in
5 March, those specific issues will be addressed on that subject
6 at that time. So I think that right now we're still
7 evaluating how it's going to be dealt with but, you know,
8 first come first serve type issues, how exhaustive will be
9 dealt with in terms of those will all be contractual issues
10 that will come out with our generic offer notes.

11 MR. DARLING: There's two places -- Gary
12 Darling with ASI. There are two places in the presentation
13 for CBR plus UBR. We're really talking about a minimum bit
14 rate in that case or are you talking about two services on the
15 same loop?

16 MR. WALLACE: Two services on the same
17 loop. Two PVCs on the same loop, different VPIs, VCIs at the
18 customer location and at the OCD port. So you need CP that's
19 capable of terminating two virtual circuits, and one of them
20 has to be capable of terminating them understanding CBR. But
21 it is two services on the same loop.

22 And to get back to that, the PROF FID, if
23 you're familiar with that, that's specified when -- specified
24 from the orders today specifies like the bandwidth of the
25 entire -- kind of the entire loop. The CBR index FID, the new

1 one, will specify the bandwidth characteristics of just the
2 little piece and then UBR gets whatever's left. In the same
3 way -- it works exactly the same way I was showing for the
4 entire OC-3 where CBR is guaranteed a portion and UBR gets
5 whatever's left. It works the same way on the individual
6 loop. The CBRI FID will guarantee a specific portion of that
7 for the CBR traffic and UBR gets whatever's left. Question in
8 the back.

9 MR. GENTRY: Darrell Gentry for
10 [unintelligible] Communications. Is there any -- or do we --

11 COURT REPORTER: I'm sorry, I can't hear
12 you.

13 MR. GENTRY: Pricing for the CBR PVC.

14 MR. WALLACE: I'm going to defer that to
15 Pete.

16 MR. WILCOX: That's really product in
17 nature. I don't think at this point in time it is -- correct
18 me if I'm wrong, other side of the table. It will be coming
19 out shortly, okay, and obviously will be part of the
20 contractual offering. So the answer right now quite frankly
21 is not at this time.

22 MR. BOYER: I would say that it would be
23 -- the rates, terms and conditions would all be part of the
24 accessible letter that would go out.

25 MR. WALLACE: And I think something else

1 that we wanted to make clear is the next collaborative meeting
2 which Bethaney is going to schedule before the end of this
3 session, we plan to provide another update and hopefully can
4 give more information about some of the specifics as we get
5 closer to the March 8th date. Sometime in the mid-February
6 range we plan on giving you another update very soon.

7 MR. GENTRY: Do you think it's only
8 symmetric only initially?

9 MR. WALLACE: Initially symmetric only.
10 If there's a -- an asymmetric offering that you're interested
11 in, like I said, we'd love to hear more about particular
12 protocols or applications that need to utilize CBR. Other
13 questions? Heck of a deal. All right. That's all I've got.
14 Back to Pete. I'll be around the rest of the day for
15 questioning.

16 MR. WILCOX: That officially wraps up the
17 morning part of our presentations or our scenario here for
18 what we wanted to cover. Obviously there's time -- there's a
19 little bit of extra time as folks are setting up lunch now,
20 folks that didn't have enough during breakfast and I believe
21 the food's going to be good.

22 Please take advantage of our availability.
23 If there's things that you want to discuss, if there's
24 anything that's on your mind from the morning, the open panel
25 discussion for this afternoon you can bring it up there.

1 Catch one of us during lunch if you like. Let's make an
2 agreement that we don't leave here with questions unasked or
3 at least broached, all right. That is still the information
4 exchange that gives us more to work on and you folks more to
5 think about as we look forward.

6 MS. GENTRY: Can we ask some questions now
7 and then if you want to defer them because they're going to be
8 covered in other topics, advise us of that?

9 MR. WILCOX: So long as let's say it
10 relates to the morning?

11 MS. GENTRY: Because I'm thinking this is
12 kind of a technical morning and then if we have other things
13 this afternoon, that's kind of a catchall.

14 MS. BEATA: I don't see any problem with
15 that. I know that we're running ahead of schedule, which I
16 just can't believe, so this might be a good time for us to run
17 through some of the administrative things we need to do like
18 schedule future meetings, talk about the calendar, talk about
19 locations, etc. That'll get us a little bit closer to where
20 we were on the schedule and then we'll have lunch and then
21 we'll move into that open session. How is that? Is that
22 okay? Bethaney, did you want to proceed with any of the admin
23 issues you need to?

24 MS. PRICE: First we need to schedule
25 monthly collaborative sessions for the rest of the quarter,

1 and I was thinking maybe February and I'm not sure where.
2 Where are you guys going to be located through, what state or
3 what region? So if anybody has any proposed dates, that would
4 be great.

5 MS. GENTRY: Bethaney, talk more about
6 what your intended purpose is for the February meeting and if
7 we can get dates so we can back it into other meetings that
8 we're having with SBC.

9 MS. PRICE: Okay. The February meeting is
10 going to go ahead and cover the issues matrix that we have
11 been going over, the monthly big stack of issues matrix to go
12 over any answers/questions. I'm going to go ahead and try to
13 locate a subject matter expert on the LoopQual as discussed in
14 our last industry collaborative meeting to go over screen
15 prints and other questions that you may have for LoopQual.

16 We also for one of the monthly meetings
17 will try to get DTI representatives to go over the DTI tool
18 again. And that should -- that could either be February or
19 March. Either way it works out. I think that's about it.
20 We'll go over CBR again, and I think that's about it.
21 Probably try a quick trial and discussion about ten to 15
22 minutes to go over the status of the trial.

23 So the proposed dates I have for February
24 were February 15th.

25 MS. GENTRY: There's a Kansas hearing.

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1 MS. PRICE: Kansas hearing? How about
2 the week of the 19th?

3 MS. GENTRY: Is the 19th a holiday?

4 MS. PRICE: Well, the week of the 19th.

5 MS. GENTRY: How about the 22nd?

6 MS. PRICE: The 22nd? February 22nd.

7 Okay. And I'll send out an E-mail reminder with location
8 information. March, do we want to keep the 22nd? Okay. Go
9 ahead and keep March 22nd. And April we can either go the
10 19th or the 26th. April 19th.

11 And we're also going to have to talk about
12 our next quarterly meeting which will be sometime April, May
13 or June. I don't know what dates everyone will be available
14 for another meeting.

15 MS. BEATA: And also location.

16 MS. PRICE: I'm sorry? And where. I know
17 we did -- the last two we've had in Dallas. There was
18 recommendation about rotating them around to Chicago or San
19 Francisco. Does anybody have a preference?

20 MS. LOPEZ: California.

21 MS. CARTER: Chicago's right in the middle
22 of the country.

23 MS. PRICE: How many hands for Chicago?

24 UNIDENTIFIED SPEAKER: What month?

25 MS. PRICE: June or May. How many for San

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1 Francisco? It's about half and half.

2 MS. GENTRY: One or the other, is that
3 guaranteed?

4 MS. PRICE: I'm sorry?

5 MS. GENTRY: Is it your intent to have it
6 in either Chicago or San Francisco?

7 MS. PRICE: Or Dallas, if people would
8 like. But we would like to rotate for everyone to attend. So
9 we could do Chicago the next time, San Francisco sometime in
10 the summer. Would that be agreeable?

11 MS. GENTRY: . . . so we can start zeroing
12 in on it?

13 MS. PRICE: How about the week of May
14 13th, that Thursday? I think it's the 16th, the 17th. May
15 17th.

16 MS. LOPEZ: Where are you saying that's at
17 now?

18 MS. PRICE: Chicago. May 24th. It's
19 right before the holiday.

20 MS. GENTRY: Is there a possibility for
21 June or are you trying to do May?

22 MS. PRICE: We could do May or June.

23 MS. GENTRY: Is there a possibility of
24 doing it like the 10th then or something earlier?

25 MS. PRICE: We can do it anytime. Is that

1 agreeable?

2 MS. CARTER: Bethaney, you'll be sending
3 out the transcript for this meeting like you did the last
4 time?

5 MS. PRICE: Yes. Transcript, copy of all
6 the presentations and any other information that we need to
7 distribute and reminder of the meetings.

8 MS. CARTER: Thank you.

9 MS. PRICE: We'll go ahead and try to keep
10 around the 22nd to 19th for the monthly meetings through the
11 year. Those can change and we'll address that every quarterly
12 meeting. And that's all I have. So I think everything's
13 ready in the back if you want to go ahead and break for lunch
14 or if you have any other questions that you need to address.

15 (Lunch break was taken.)

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1 STATE OF TEXAS *

2 COUNTY OF DALLAS *

3

4 I, Christy Russell, a Certified Shorthand Reporter
5 in and for the State of Texas, hereby certify to the
6 following:

7 That this transcript is a true record of the
8 proceedings held at the Project Pronto CLEC Collaborative on
9 January 25, 2001 at Three Bell Plaza, 308 S. Akard Street,
10 Dallas, Texas 75202.

11 CERTIFIED TO on this, the _____ day of February,
12 2001.

13

14

15

16

CHRISTY RUSSELL, Texas CSR 5459

17 Expiration Date: 12/31/2002

18 U.S LEGAL SUPPORT

900 Jackson Street, Suite B200

19 Dallas, Texas 75202

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20 Job#02-17950

21

22

23

24

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EXHIBIT MAC-5

COVAD PROPOSED SPECIAL REQUEST LANGUAGE

1 AVAILABILITY OF FUTURE FEATURES AND FUNCTIONS

- 1.1. AMERITECH-ILLINOIS shall collaborate with CLECs to ensure that additional features and functions that are technically and economically feasible are introduced.
- 1.2. A feature and/or function shall be deemed "technically feasible" if such capability has been made commercially available by the manufacturer of the DSL-enabled NGDLC deployed by AMERITECH-ILLINOIS. *and/or such capability is made available at retail by the CLEC or its affiliates.*
- 1.3. A feature and/or function shall be deemed "economically feasible" if the CLEC is willing to pay TELRIC-compliant rates based on the per-unit capacity cost associated with that feature and/or function (e.g., for the amount of bandwidth dedicated to or used by the CLEC).
- 1.4. Should the vendor of any DSL-enabled DLC, including NGDLC deployed in conjunction with Project Pronto, develop in the future, for use with such vendor's NGDLC equipment, a feature and/or function (such as other versions of xDSL or additional ATM QoS offerings) desired by CLEC, or should CLEC desire a higher grade ATM QoS than currently made available, CLEC may submit a request to SBC for such feature, function or ATM QoS. Requests for such capabilities shall fall into four separate categories, depending on the type of request. The categories are as follows: 1.) Special Request for a new feature and/or function that is not currently commercially available by the manufacturer (New Feature and/or Function Development), 2.) Special Request that involves a software upgrade only, (Software Only Upgrade) 3.) Special Request that requires a new type of line card to be installed at the remote terminal (Line Card), and 4.) Special Request for a feature and/or function that is commercially available from the manufacturer, but has not yet been tested and approved by SBC (Approval For Use).

2. SPECIAL REQUEST – NEW FEATURE AND/OR FUNCTION DEVELOPMENT

- 2.1. Should CLEC desire a specific feature and/or function not presently commercially available from the manufacturer of the DSL-enabled DLC, CLEC will follow the Special Request – New Feature And/Or Function Development Process outlined herein. This process is specifically designed to examine technical feasibility, formulate developmental processes, indicate pricing, and work collaboratively with the vendor to provide deployment timeframes for the unique feature and/or functionality being requested. If requested by CLEC, AMERITECH-ILLINOIS will hold a review meeting prior to the actual submission of the Special Request to discuss the specific arrangement with CLEC in an attempt to determine technical feasibility. Such meeting will be held within five (5) business days of CLEC's request.
- 2.2. CLEC will submit in writing to AMERITECH-ILLINOIS the Special Request Process Application, with appropriate operational narrative, drawings, technical references, location(s) for deployment, requested implementation date(s), and a non-binding forecasted quantity over a (36) month period. A \$100 fee will accompany the Special Request application. This Application is available in the CLEC Handbook.
- 2.3. AMERITECH-ILLINOIS will acknowledge receipt of the Special Request Process Application within one (1) business day. Such acknowledgement will be sent to the CLEC via e-mail, as well as though U.S. Mail.

2.4. AMERITECH-ILLINOIS shall provide a preliminary analysis no later than forty five (45) business days following CLEC submission of the Special Request Process Application. If AMERITECH-ILLINOIS determines that further development is technically feasible, AMERITECH-ILLINOIS will return to the CLEC an analysis with a price quote with indication of a cap on the anticipated developmental costs, based on the information provided by the CLEC. AMERITECH - ILLINOIS shall also provide CLEC with a developmental timeline detailing due dates for specific project milestones. If AMERITECH-ILLINOIS believes that further development is not technically feasible, AMERITECH-ILLINOIS will provide CLEC a detailed written explanation of the basis for its belief.

2.5. CLEC will notify AMERITECH-ILLINOIS by written authorization whether to proceed with development within ten (10) business days from receiving the AMERITECH-ILLINOIS analysis and price quote.

2.6. If CLEC requests to proceed with development, AMERITECH-ILLINOIS shall work collaboratively with the vendor of the DSL-enabled DLC and will inform the CLEC of the prospective delivery date as soon as available. CLEC will be responsible for the TELRIC-based up front development costs incurred by AMERITECH-ILLINOIS in response to any request for which the CLEC has requested AMERITECH-ILLINOIS to proceed with development.

2.7. Should CLEC cancel the request after informing AMERITECH-ILLINOIS that it wishes to proceed with development, cancellation charges will be applied, not to exceed the TELRIC-based development costs incurred by AMERITECH-ILLINOIS up to and including the point of cancellation.

3. SPECIAL REQUEST-SOFTWARE ONLY (E.G., G.LITE)

3.1. Upon receipt of a Special Request Process Application from a CLEC as outlined above for a feature and/or function that only requires a software upgrade, AMERITECH-ILLINOIS will make available the requested feature and/or function to the requesting CLEC, at the locations specified by CLEC (provided such locations are DSL-enabled locations), within thirty (30) calendar days of the receipt of CLEC's confirmation to proceed with the deployment of the requested feature and/or function.

3.2. Upon receipt of the initial CLEC Special Request Process Application for a feature and/or function that only requires a software upgrade, AMERITECH-ILLINOIS will acknowledge receipt of such request within one (1) business day and will provide the CLEC with a price quote of the estimated TELRIC-based amount on a per-unit basis. Such quote shall include at a minimum the estimated price of the feature and/or function on both a monthly recurring and non-recurring basis, and shall be provided to CLEC within 10 business days of receipt of such request. If SBC has previously determined the cost for such offering, then the quote will be provided to CLEC within one (1) business day. Following this response, CLEC will be provided 10 business days to determine whether CLEC would like to proceed with deployment of the feature and/or function. *if costs exist*

3.3. AMERITECH - ILLINOIS will perform the requested software upgrades within thirty (30) calendar days from the receipt of the CLEC's confirmation to proceed with the deployment of the requested feature and/or function.

4. SPECIAL REQUEST - NEW TYPE OF LINE CARD (E.G., G.SHDSL)

4.1. Upon receipt of a Special Request Process Application from a CLEC as outlined above for a feature and/or function that requires a new line card to be deployed in the DSL-enabled DLC, AMERITECH-ILLINOIS will make available such a feature and/or function to the requesting

CLEC, at the locations specified by CLEC (provided such locations are DSL-enabled locations) within thirty (30) calendar days of receipt of CLEC's confirmation to proceed with the deployment of the requested feature and/or function.

- 4.2. SBC shall follow its Unbundled Network Element Facility Modification and Construction Policy ("FMOD") Issue 4.1, released June 2001, when determining facility availability.
- 4.3. Upon receipt of the initial CLEC Special Request Process Application for a feature and/or function that requires the deployment of a new line card, AMERITECH-ILLINOIS will acknowledge receipt of such request within one (1) business day and will provide the CLEC with a price quote of the estimated TELRIC-based amount on a per-unit basis. Such quote shall include at a minimum the estimated price of the feature and/or function on both a monthly recurring and non-recurring basis and shall be provided to CLEC within ten (10) business days of receipt of such request. If SBC has previously determined the cost for such offering, then the quote will be provided to CLEC within one (1) business day. Following this response, CLEC will be provided ten (10) business days to determine whether CLEC would like to proceed with deployment of the feature and/or function.
- 4.4. AMERITECH-ILLINOIS will perform any necessary software and hardware upgrades within thirty (30) calendar days from the receipt of CLEC's confirmation to proceed with the deployment of the requested feature and/or function.

5. SPECIAL REQUEST – APPROVAL FOR USE ("AFU") PROCESS

- 5.1. If a feature and/or function that is commercially available from the manufacturer has not been tested by SBC, SBC, at its option, shall perform a field test to verify that the requested feature and/or function will work in the company's existing network. The AFU process will only be necessary for the first request submitted by any CLEC for a specific feature and/or function.
- 5.2. AMERITECH-ILLINOIS will introduce the requested feature and/or function into the AFU process upon receipt of a CLEC response confirming its agreement to move forward with the feature and/or function. Following such confirmation, the AFU process will be completed within forty (40) business days. AMERITECH-ILLINOIS will make available the feature and/or function at the specified DSL-enabled RT sites no later than thirty (30) calendar days after the completion of the AFU Process for the requested feature and/or function.